

**Abstract**

A mobile telecommunications system has an IP-based GSM system, a UMTS system,  
and a connection connecting both the IP-based GSM system and the UMTS system to a  
common IP network. The telecommunication system can be incorporated in a network having  
5 a plurality of systems all connected by the common IP network to permit compressed speech via  
an A-interface in each system and throughout the network. The system permits an operator to  
realize a significant reduction in operating costs.